

## ABSTRACT

A computer implemented translation system provides a programming interface between a client and remote devices connected to a vehicle data network. The translation system presents programmers with a uniform abstraction of vehicle networks that permits programming and diagnostic procedures to be carried out without reference by the programmer to nuances of the particular network class used on the motor vehicle.

Three major interfaces are defined to implement the invention. A network interface incorporates a plurality of functions representing a model of a physical network. A data link interface responsive to client requests for acquiring a network instance corresponding to a physical network from the network interface. The establishment of a network instance may involve reference to a database to obtain appropriate drivers for the underlying physical network represented by the network instance. A remote device interface incorporates a plurality of functions representing the physical devices callable through the network interface and handles messaging between the client and a physical device attached to the underlying physical network.